

# BICYCLE SHIFT CONTROL DEVICE WITH DECREASED STRESS DURING SHIFTING

## Abstract

A control apparatus is provided that facilitates the operation of a component that is subjected to stress from a stress-inducing component. The apparatus comprises an operation sensing unit that senses when the component should be operated; a stress reducing unit that provides a signal for reducing an amount of stress applied to the component from the stress-inducing component when the operation sensing unit senses that the component should be operated; and a control unit that provides a signal for operating the component a predetermined time after the stress reducing unit provides the signal.